

Claims

[c1] A method for making toric lenses, comprising the steps of:

- providing a casting cell that includes a front mold, a toric back mold, and a gasket;
- providing an annular carrier ring;
- dimensioning said annular carrier ring to have a diameter greater than a diameter of said toric back mold so that an annular step is formed between a peripheral edge of said toric back mold and said annular carrier ring;
- providing said gasket with a radially-inwardly extending annular wall so that a first flat step is formed where a front edge of said annular wall meets said gasket at a right angle and so that a second flat step is formed where a rear edge of said annular wall meets said gasket at a right angle;
- adapting said first flat step to squarely abut and support a peripheral edge of said front mold when said casting cell is assembled;
- positioning said peripheral edge of said front mold in squarely abutting relation to said first flat step;
- positioning said annular carrier ring in squarely abutting relation to said second flat step;
- filling a cavity defined by a back surface of said front mold and a front surface of said toric back mold with a reactive resin; and
- curing said resin.

[c2] A method for making toric lenses, comprising the steps of:

- providing a casting cell that includes a front mold, a toric back mold, and a gasket;
- integrally forming together an annular carrier ring and said toric back mold and making said annular carrier ring coextensive with a peripheral edge of said toric back mold;
- forming a square, annular step in said peripheral edge of said toric back mold;
- providing said gasket with a radially-inwardly extending annular wall so that a first flat step is formed where a front edge of said annular wall meets said gasket at a right angle and so that a second flat step is formed where a rear edge of said annular wall meets said gasket at a right angle;

positioning said peripheral edge of said front mold in squarely abutting relation to said first flat step;
positioning said square, annular step formed in said peripheral edge of said toric back mold in squarely abutting relation to said second flat step;
filling a cavity defined by a back surface of said front mold and a front surface of said toric back mold with a reactive resin; and
curing said resin.

[c3] A method for making toric lenses, comprising the steps of:
providing a casting cell that includes a front mold, a toric back mold, and a gasket;
forming a radially-inwardly extending annular wall in said gasket so that a first flat step is formed where a front edge of said annular wall meets said gasket, said first flat step adapted to squarely abut and support a peripheral edge of said front mold when said casting cell is assembled;
forming an annular projection having a predetermined geometric configuration in a peripheral sidewall of said toric back mold;
forming an annular recess in said gasket for receiving said annular projection when said casting cell is assembled;
positioning said peripheral edge of said front mold in squarely abutting relation to said first flat step;
positioning said annular projection into seated relation to said annular recess;
filling a cavity defined by a back surface of said front mold and a front surface of said toric back mold with a reactive resin; and
curing said resin.

[c4] The method of claim 1, further comprising the step of forming a radius at a juncture of said toric back mold front surface and said annular carrier ring to facilitate removal of a cast lens from the casting cell and to provide a lens having a smooth, rounded aesthetically pleasing edge.